of which are almost invariably associated with widespread undernutrition.

Diseases Spread or Contracted Chiefly Through Intestinal or Urinary Tract

Typhoid and Paratyphoid Fevers. Typhoid fever is sporadic, and 10 to 35 cases are reported from the Colony each year. Over one half of the known cases occur usually among nonresident laborers. Paratyphoid fevers are grouped with typhoid in the morbidity statistics. The rate of infection is not known, but both paratyphoid A and paratyphoid B fevers are undoubtedly present. Typhoid fever is apparently endemic in the Protectorate, although recognized cases are reputedly rare in the Hadhramaut.

Dysenteries. Dysentery is prevalent throughout this region, where the unhygienic habits of the people and the abundance of flies promote the spread of intestinal infections. From 500 to 1,500 cases are treated annually in the civilian hospitals and dispensaries in the Colony. Amebic dysentery predominates among the few cases in which the differential diagnosis is established, but a large proportion of the remainder are probably bacillary infections. Of the 589 cases recorded in 1949, 1 was diagnosed as bacillary dysentery and 48 as amebic, while 540 were unclassified. The percentage of carriers of *Endamoeba histolytica* is believed to be high: it has been estimated at 40 to 50 per cent among immigrants from Yemen, many of whom are engaged in the handling of foodstuffs in the Colony.

Amebic and bacillary dysentery, as well as diarrhea and enteritis, are grouped together as "dysentery" in the official statistics. In each of the 5 years 1946-50, the dysentery deaths numbered 334 to 406, or approximately 20 to 25 per cent of the recorded mortality in the Colony. Among the 393 deaths reported in 1950 as due to dysentery, 107 were among the immigrant population. The younger age groups are most seriously affected, and the local au-

his snails have been described from some of the affected foci.

ANCYLOSTOMIASIS. Hookworm infection occurs in Lahej and a few agricultural centers in Western Aden Protectorate. *Necator americanus* has been identified in the cases treated at the Civil Hospital in Aden.[20]

OTHER HELMINTH INFECTIONS. Infections with one or more types of intestinal worms are prevalent, particularly among the peoples of the Protectorate. Ascariasis is widespread. Trichuriasis and, to a lesser extent, enterobiasis are common. Hydatid disease is reported among individuals from the Colony and from the interior. Infection with the beef tapeworm, *Taenia saginata*, is enzootic among the cattle in the tribal districts, and human infections are undoubtedly frequent. Cases are occasionally encountered among immigrant families in the Colony. The pork tapeworm, *T. solium*, is rare, but infections are sometimes seen in the Aden hospitals.

Other Infections. *Brucella melitensis* is enzootic among the goats in this area, and Malta fever is diagnosed from time to time in the Colony hospitals and dispensaries.

DISEASES SPREAD CHIEFLY THROUGH THE RESPIRATORY TRACT

Tuberculosis. Tuberculosis is one of the most prominent diseases affecting the inhabitants of southern Arabia, but no precise information is available, except for Aden Colony. The high degree of undernutrition and overcrowding, and the low standards of personal hygiene and sanitation prevailing among large sections of the population, favor the spread of the infection. The disease is probably prevalent among the women who are confined to close quarters by the *purdah* system and among the young children in close contact with them. In a small tuberculin test survey covering 95 Aden township schoolboys of 7 to 12 years of age, in 1945,[2] positive reactions were obtained in 56 per cent—a rate which ranks high among those usually found in

75 per cent in Shuqra. In most localities, the infection rates ranged from 27 to 88 per cent among children under 15 years of age and from zero to 48 per cent in persons over 15 years of age. The Fadhli and the Abdali tribal districts were the most seriously affected regions visited.

Diseases of the Skin. Favus, ringworm and other mycotic skin infections are widely distributed. Madura foot is common in the Protectorate, and cases are seen in the Colony hospitals each year among patients from the interior. Phagedenic ulcers are responsible for considerable disability among laborers in the Colony and in all parts of the Protectorate. Several thousand cases are treated each year in the hospitals and the dispensaries in Aden Colony, where they are usually designated as "Yemen ulcers." The ankle is the most frequent site of infection, and amputation is often necessary in neglected cases.

Scabies and impetigo are prevalent, especially among the children of inland towns and villages who live under congested, insanitary conditions. By contrast, surprisingly few cases of scabies are encountered among the children seen in the schools in Aden township.

Leprosy. Leprosy is endemic in the Protectorate, but no indigenous cases have been reported from the Colony within recent years. The infection is probably not extensive, although foci of the disease are known to exist in the Hadhramaut and in the Lahej, the Dhala' and the Abyan areas in the western protectorate. As lepers are not discriminated against socially, some difficulty is encountered in controlling the movement of infected individuals in the Colony. A small leper hospital is located at Sheikh Othman: it receives patients not only from Aden territory but also from Yemen. Eighteen of the 29 patients in residence in 1939[10] were open nodular or lepromatous cases.

Other Infections. Tetanus is endemic, but reported cases are rare.

p. 249(A)